

## <sup>241</sup>Cm

<sup>241</sup>Cm was identified in 1952 by Higgins and Street from the University of California at Berkeley in “The radiation characteristics of Cm<sup>240</sup> and Cm<sup>241</sup>” (1952Hi11). A <sup>239</sup>Pu target was bombarded with 25–40 MeV  $\alpha$  particles to form <sup>241</sup>Cm in the ( $\alpha$ ,2n) reaction. Conversion electrons and  $\alpha$  particles were measured following chemical separation. “When the bombardment energy was between 25 and 28 Mev, only the 35-day and 162-day activities were observed. At these energies the ( $\alpha$ ,2n) reaction would be expected to predominate, while the ( $\alpha$ ,3n) should be in such low incidence that products of it would not be detected. For this reason the 35-day activity was assigned to Cm<sup>241</sup>.” Seaborg et al. had earlier assigned a 55 d half-life to either <sup>241</sup>Cm or <sup>243</sup>Cm (1949Se01).

Adapted from reference (2013Fr02)

- 1949Se01 G. T. Seaborg, R. A. James, and A. Ghiorso, *The Transuranium Elements: Research Papers, Book 2, Vol. 14B, paper 22. 2*, G. T. Seaborg ed. , p. 1554 (1949).
- 1952Hi11 G. H. Higgins and K. Street Jr., *Phys. Rev.* **86**, 252 (1952).
- 2013Fr02 C. Fry and M. Thoennessen, *At. Data Nucl. Data Tables* **99**, 96 (2013).

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